

**ETHNOMEDICINAL USE OF PTERIDOPHYTE FROM COURTALLUM HILLS,
TIRUNELVELI DISTRICT, TAMIL NADU, INDIA**

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ABSTRACT

The study enumerates the Pteridophytes widely used by the local people and tribes in the treatment of various diseases in Courtallum hills of Tirunelveli district. They grow in terrestrial, epiphytic and lithophytic habitat. The present study deals with the ethnomedicinal uses of available Pteridophytes plants which are prevalent in study area, along with botanical name, family, habitat, plant part used and mode of uses.

KEYWORDS: Ethnomedicine, Pteridophytes, Courtallum, Medicinal properties.

INTRODUCTION

Pteridophytes are the seedless vascular cryptogams which occupy a position between the lower non-seed bearing and higher seed bearing plants from generally much neglected group of plants. About 250 millions years ago, they constituted the dominant vegetation on earth surface. However, they are now replaced by seed bearing plants in the modern day flora. Pteridophytes grow luxuriantly in moist tropical and temperate forest and their occurrence in different eco-geographically threatened regions from sea level to the highest mountain are of much interest. About 12, 000 species of Pteridophytes occur in the world flora of which about more than 1,000 species into 70 families and 191 genera likely to occur in India (Dixit, 1984). Recent studies shows that roughly 270 fern species found in south India, about 10 percent of the region. Fern flora occupies the forest floor, on tree trunks and branches, in the niche of rock.

The ferns had an important role in folklore medicine. These plants have been successfully used in the different systems of medicines like Ayurvedic, Unani, Homeopathic and other systems of medicines. Kirtikar *et al.* (1935) have described 27 species of ferns having varied medicinal uses. Chopra *et al.* (1956) have included 44 species and Nadkarni (1954) recorded 11 species of Pteridophytes having medicinal importance. Nayar (1959) recorded 29 medicinal ferns. May (1978) published a detailed review of the various uses of ferns and listed 105 medicinal ferns. In a recent compilation, Singh (1999) reported 160 species of useful Pteridophytes in India on the basis of phytochemical, pharmacological and ethnobotanical studies.

A systematic survey of the antibiotic activity of Pteridophytes, however has been scarcely undertaken. The antimicrobial potential of some ferns has been studied (Kumar and Kaushik, 1999; Parihar and Bohra, 2002a & b, 2003). With this background experiments were done to assess the antibacterial activities of certain ferns.

Out of 1,000 species of Pteridophytes occurring in India, 170 species have been found to be used as food, flavor, dye, medicine, bio-fertilizers, oil, fiber and bio-gas production (Manickam and Irudayaraj, 1992). The medicinal value of Pteridophytes against bacteria, fungi, virus, cancer rheumatism, diabetes, inflammation, consultant, fertility, diuretic, pesticides, hepatoprotective, and sedative had been reported. Besides sugar, starch, proteins and amino acids, ferns contain a variety of alkaloids, glycosides, flavonoids, terpenoids, sterols, phenols sesquiterpens etc. as potential components used in various industries (Kulandairaj and John de Britto, 2000).

In comparison to higher plants they have found little applications in medicine. The tribal communities, ethnic groups and folklore throughout the world are utilizing their plant parts like rhizome, stem, fronds, pinnae and spore in various way for the treatment of various ailments since ancient time.

The number of contributors about the taxonomy, ecology and distribution of Pteridophytes have been published from time to time but enough attention has not been paid towards their useful aspects. An attempt has been made to explore indigenous and ethnomedicinally important Pteridophytes and properly document their useful aspects.